

109.2 Organic Constituents (liquid and solid forms) - Methylmercury and Mercury

Selected Elements and Species SRM	Calibration Solutions							Natural Matrix						
	1493	2262	1566b	1588a	1589a	1649a	1939a	1941a	1944 [0]	1945	1946 [4]	1974b** [2]	2974 [2]	2976 [2]
[No. of Components certified]														

Component (in mg/kg) unless noted by double asterisks for %

**See certificate of analysis for wet-basis and dry-basis values(x)

Methylmercury		13.2									394	x	77.3	27.8
Total Mercury		37.1									433	x	176	61
Total Organic Carbon								4.4**						
Extractable Mass								1.15**						
Arsenic			7 650								277			
Iron			205 800								4000			

SRM	Calibration Solutions		Natural Matrix	
	1614	1588a	1649a	1944
Component (in mg/kg)				

Dibenzo-p-dioxin and Dibenzofuran Congeners

1,2,7-Trichlorodibenzo- <i>p</i> -dioxin		(0.32)		
1,2,3,4-Tetrachlorodibenzo- <i>p</i> -dioxin		(0.38)		
2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin	98.3	-0.21	0.011	0.133
2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin- ¹³ C	95.6			
1,2,3,7,8-Pentachlorodibenzo- <i>p</i> -dioxin			0.091	0.019
1,2,3,4,7,8-Hexachlorodibenzo- <i>p</i> -dioxin			0.26	0.026

1,2,3,6,7,8-Hexachlorodibenzo- <i>p</i> -dioxin	-0.39	0.68	0.056
1,2,3,7,8,9-Hexachlorodibenzo- <i>p</i> -dioxin	-0.22	0.64	0.053
1,2,3,4,6,7,8-Heptachlorodibenzo- <i>p</i> -dioxin		18.8	0.8
Octachlorodibenzo- <i>p</i> -dioxin	-1.01	201	5.8
2,3,7,8-Tetrachlorodibenzofuran		0.068	0.039
1,2,3,7,8-Pentachlorodibenzofuran		0.09	0.045
2,3,4,7,8-Pentachlorodibenzofuran		0.28	0.045
1,2,3,4,7,8-Hexachlorodibenzofuran		0.87	0.22
1,2,3,6,7,8-Hexachlorodibenzofuran		0.43	0.09
2,3,4,6,7,8-Hexachlorodibenzofuran		0.69	0.054
1,2,3,7,8,9-Hexachlorodibenzofuran		0.066	0.019
1,2,3,4,6,7,8-Heptachlorodibenzofuran		3.8	1
1,2,3,4,7,8,9-Heptachlorodibenzofuran		0.46	0.04
Octachlorodibenzofuran	-1	6.8	1
Total Toxic Equivalents (TEQ)g		0.86	0.25
Total Tetrachlorodibenzo- <i>p</i> -dioxins		0.16	0.25
Total Pentachlorodibenzo- <i>p</i> -dioxins		0.88	0.19
Total Hexachlorodibenzo- <i>p</i> -dioxins		6	0.63
Total Heptachlorodibenzo- <i>p</i> -dioxins		36.4	1.8
Total Tetrachlorodibenzofurans		0.52	0.7
Total Pentachlorodibenzofurans		1.6	0.74
Total Hexachlorodibenzofurans		5	1
Total Heptachlorodibenzofurans		9.8	1.5
Total Dibenzo- <i>p</i> -dioxins		244	8.7
Total Dibenzofurans		23.6	5

Selected Matrices

SRM	1581	1584	1586-1	1586-2	1587	1596	1614	1639	RM 8466	RM 8467	RM 8469
[No. of Components certified]	[4]	[10]	[10]	[10]	[6]	[4]	[2]	[7]			

Component (Concentrations are in mg/kg, unless noted by a single asterisk for mg/kg, a double asterisk for mg/L @ 25°C, or a dagger for mass fraction, in %.)

Motor Oil-Aroclor 1242	100
Motor Oil-Aroclor 1260	100
Transformer Oil-Aroclor 1242	100
Transformer Oil-Aroclor 1260	100
2-Chlorophenol	64.4**

Phenol	29.7**	117	116		
2-Nitrophenol	25.2**	103.6	101.9		
2,4-Dimethylphenol	51.6**				
2,4-Dichlorophenol	35.6**	102.5	82.2		
4-Chloro-m-cresol	27.4**				
2,4,6-Trichlorophenol	20.4**				
4-Nitrophenol	20.7**				
4,6-Dinitro-o-cresol	20.1				
Pentachlorophenol	15.4**				
2,4-Dinitrophenol	(22.4)**				
Carbon Tetrachloride		128.5	124.4		157.0**
Benzene		101.1	99		
Chlorobenzene		133	144		
Nitrobenzene		126	134.5		
Naphthalene		126.5	126.6		
Bis(2-ethylhexyl)phthalate		63.9	60.4		
Benzo[<i>a</i>]pyrene		49.2	44.1		
2-Nitrofluorene				9.67	
9-Nitroanthracene				5.01	
3-Nitrofluoranthene				9.24	
1-Nitropyrene				8.95	4.38
7-Nitrobenz[<i>a</i>]anthracene				9.27	
6-Nitrochrysene				8.13	
6-Nitrobenzo[<i>a</i>]pyrene				-6.1	
1,3-Dinitropyrene					2.1
1,6-Dinitropyrene				4.82	
1,8-Dinitropyrene				8.9	
2,3,7,8-TCDD					98.3*
2,3,7,8-TCDD- ¹³ C					95.6*
Chloroform					6235**
Chlorodibromomethane					124.6**
Bromodichloromethane					389.9**
Bromoform					86.5**
Trichloroethylene					85.8**
Tetrachloroethylene					40.6**
g-Hexachlorocyclohexane (Lindane)					(99.9)

4,4'-DDE
4,4'-DDT

(99.8)

(99.8)

Values in parentheses are for information only.
